

IN THE CLAIMS:

The following is a claim listing with status identifiers in parenthesis

Listing of Claims:

1. (Currently Amended) A network device, wherein the device [[for]]:
~~detecting~~ detects a failure along an ingress region of a primary path;
~~re-routing~~ re-routes traffic from the primary path associated with an original Internet Protocol (IP) address to an alternate path which includes the device using a forwarding table that includes IP and Multi-Protocol Label Switched (MPLS) routing information while associating the original IP address to the alternate path upon detection of the failure; and
~~allowing~~ allows traffic to travel along the primary path when the failure is no longer detected along the ingress region.
2. (Canceled).
3. (Original) The device of claim 1 wherein, the device is a multi-protocol label switched (MPLS) device and the primary and alternate paths are label switched paths (LSPs).
4. (Previously Presented) The device of claim 1 wherein the failure is at a neighboring network device or along a link between the device and the neighboring network device.
5. (Currently Amended) A network device, wherein the device [[for]]:
~~receiving~~ receives a failure message;
~~re-routing~~ re-routes traffic from a primary path associated with an original IP address to an alternate path using a forwarding table that includes IP and MPLS routing information, said rerouting maintaining the original address, the alternate path comprising devices which maintain a same quality of service as the primary path and are not a part of the primary path except for the network device and a destination network device; and
~~allowing~~ allows traffic to travel along the primary path when the failure is no longer detected.

6. (Canceled).

7. (Original) The device of claim 5 wherein, the network device is a MPLS device and the primary and alternate paths are LSPs.

8. (Original) The device of claim 5 wherein, the quality of service is associated with at least one of the set consisting of bandwidth, delay, delay jitter, and packet loss rate.

9. (Previously Presented) A method for re-routing traffic comprising the steps of:
detecting a failure along an ingress region of a primary path;
re-routing traffic from the primary path associated with an original IP address to an alternate path which includes a source device using a forwarding table that includes IP and MPLS routing information while associating the original address to the alternate path upon detection of the failure; and
allowing traffic to travel along the primary path when the failure is no longer detected along the ingress region.

10. (Canceled).

11. (Original) The method of claim 9 wherein the primary and alternate paths are LSPs.

12. (Previously Presented) The method as in claim 9 wherein the failure is at a neighboring network device or along a link between the initiating device and the neighboring network device.

13. (Previously Presented) A method for re-routing traffic comprising the steps of:
receiving a failure message;
after said receiving step, re-routing traffic from a primary path associated with an original IP address to an alternate path using a forwarding table that include IP and MPLS routing

information, said rerouting maintaining the original address, the alternate path comprising devices which maintain a same quality of service as the primary path and are not a part of the primary path except for an initiating network device and a destination network device; and

allowing traffic to travel along the primary path when the failure is no longer detected.

14. (Canceled).

15. (Original) The method of claim 13 wherein the primary and alternate paths are LSPs.

16. (Original) The method of claim 13 wherein, the quality of service is associated with at least one of the set consisting of bandwidth, delay, delay jitter, and packet loss rate.

17. (Previously Presented) A network device comprising:
means for detecting a failure along an ingress region of a primary path;
means for re-routing traffic from the primary path associated with an original IP address to an alternate path which includes the device using a forwarding table that includes Internet Protocol (IP) and Multi-Protocol Label Switched (MPLS) routing information while associating the original IP address to the alternate path upon detection of the failure; and

means for allowing traffic to travel along the primary path when the failure is no longer detected along the ingress region.

18. (Canceled).

19. (Original) The device of claim 17 wherein the device is a MPLS device and the primary and alternate paths are LSPs.

20. (Previously Presented) The device of claim 17 wherein the failure is at a neighboring network device or along a link between the device and the neighboring network device.

21. (Previously Presented) A network device comprising:

means for receiving a failure message;

means for re-routing traffic from a primary path associated with an original IP address to an alternate path using a forwarding table that includes IP and MPLS routing information, said means for re-routing maintaining the original address, the alternate path comprising devices which maintain a same quality of service as the primary path and are not a part of the primary path except for the network device and a destination network device; and

means for allowing traffic to travel along the primary path when the failure is no longer detected.

22. (Canceled).

23. (Original) The device of claim 21 wherein, the network device is a MPLS device and the primary and alternate paths are LSPs.

24. (Original) The device of claim 21 wherein, the quality of service is associated with at least one of the set consisting of bandwidth, delay, delay jitter, and packet loss rate.

25. (Currently Amended) A source network device, wherein the device [[for]]:

~~detecting~~ detects a failure along an ingress region of a primary path, where the ingress region comprises a link associated with the source network device;

~~re-routing~~ re-routes traffic from the primary path associated with an original Internet Protocol (IP) address to an alternate path which includes the device using a forwarding table that includes IP and Multi-Protocol Label Switched (MPLS) routing information while associating the original IP address to the alternate path upon detection of the failure; and

~~allowing~~ allows traffic to travel along the primary path when the failure is no longer detected along the ingress region.

26. (Previously Presented) The device of claim 25 wherein, the device is a multi-protocol label switched (MPLS) device and the primary and alternate paths are label switched paths (LSPs).

27. (Previously Presented) The device of claim 25 wherein the link associated with the source network device is an outgoing link or a link between the source network device and a neighboring network device.

28. (Currently Amended) A source network device, wherein the device [[for]:
~~detecting~~ detects a failure along an ingress region of a primary path, where the ingress region comprises a link associated with the source network device, and the link comprises either an outgoing link or a link between the source network device and a neighboring network device;
~~re-routing~~ re-routes traffic from the primary path associated with an original Internet Protocol (IP) address to an alternate path which includes the device using a forwarding table that includes IP and Multi-Protocol Label Switched (MPLS) routing information while associating the original IP address to the alternate path upon detection of the failure; and
~~allowing~~ allows traffic to travel along the primary path when the failure is no longer detected along the ingress region.

29. (Previously Presented as New) The device of claim 28 wherein, the device is a multi-protocol label switched (MPLS) device and the primary and alternate paths are label switched paths (LSPs).